



***Squier Ball  
Springboard Diving  
Camp***

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**Basic physical skills for springboard diving: Stretching and Strength by R. Squier Ball**

The following stretching and strength maneuvers are useful for springboard and tower diving, but they can be applied to many other sports as well. The most important point is not to push to injury point, but to build up flexibility and strength. If you push yourself too hard, you don't do anybody any good, while watching from the stands.

A,1) Build your control over your legs. There are a multitude of ways to do this. I start with what is known as a "pilates" exercise, in which you lie on your side, with your legs slightly in pike, one elbow on the mat and the upper, other hand, on the mat in front of your chest. Lift the leg that's on top to vertical, make a circle forward and away from you and bring the leg back to the starting point. 5 times.

2) Same position, but now lift and rotate the leg in the opposite direction and complete the circle 5 times.

3) Flip over to the other side and repeat 1) and 2) with the other leg.

B. 1) Go back to the start position for A.1). This time bring the upper leg forward, one foot off the ground, keeping it straight,...like kicking a football. As far as you can go comfortably.

2) At the end of the leg stretch, bend the leg at the knee and fold it back in to be in line with the leg underneath. 5 times

3) Now bend the upper leg as you bring it forward and stretch it out to the same place you did for B 1). Return it to the start position.

4) Flip over and repeat the same stretching for the leg that was on the bottom.

You might think this one is too easy, but I believe it has really helped and maintained my flexibility.

C. Another exercise which is much harder for big people, is to place yourself between two exercise bars that are about 1 foot off the ground (or higher if you want). Place your hands on the bars on either side of you and lift your whole body, with your legs in pike. If you don't have the exercise bars, no big deal. Use two chairs. Or anything else that makes you lift yourself and use your stomach muscles to spread your legs in the air and then bring them back together. Either let yourself down or continue five times. This is a toughy!

D. Simple push-ups. Do sets of five. One set of five will do at the start of a month-long program; Let at least one day go by before doing this again. Second week: Two sets of five. You don't need to go for three or four sets, since you might hurt yourself, and that's a NO NO.

E. Chin-ups: Can you do even one? Don't try them every day. One day on, one or two days off. The goal? If you can do three without cheating, you're well on your way. Years ago I could do eight, but not anymore. I want to get back to where I once was, but ... So while I wait for the great day when I can do maybe five in a row, I try one unassisted, and then I cheat by pushing off a low box with one foot. Plus do you try them with palms facing you or palms out? You will have better luck with palms facing you.

F. Do you have a rope or chinning bar, where you can hang on while lifting your legs to either touch the bar, or to just go to horizontal and spread them and then bring them back together again? This calls for stomach muscles. Pike. With tuck, bring the knees up to the chest and no spread. Try both.

G) Jumping and hopping. I could write at least a page or more on this one. There are the little hops, and then there are the biggies.

**Little hops:** Place a step-up surface, not much more than a foot high, against a firm wall or post. I use foam pieces taped together in layers. Step up onto it twenty times with first one leg; then step backward and down to the floor. 20 per leg.

**OR the biggies:**

Have three boxes that are perfectly the same dimensions on all six sides. Space them so that if you jump over the first one, you have enough space to gather yourself to jump over the next one. You might cover the tops with indoor/outdoor rug material (as a pad).

You also need an exercise mat, similar to a wrestling mat. It should have some give, but not too much. Reason: a concrete floor doesn't give. You could injure your knees, particularly if you happen to land with knees locked straight. The three boxes are distributed on top of the landing mat, so that you can jump over each box, in sequence. Do five sets of three jumps.

Now have another box that is about two and one half feet high. AND you need a vertical pole, with a horizontal limb sticking out that you can adjust. Track supply shops should have items like this., or a mail-order sport magazine.

As soon as you have completed your fifteen jumps over the boxes, you go to the bigger box, step off of it, land and jump immediately to touch the "feathers" sticking out from the vertical pole. You will be amazed how this exercise adds to your jumping power. Before starting any part of this jumping drill, try one or two off the bigger box, or from the mat with no stepping off from the big box. This will demonstrate to you what the box jumping will do to increase your explosive power, when you have completed just one set of this whole program.

H. Actual running! But not too much. You need "fast twitch" muscle conditioning for diving. Not the slow twitch you get from riding a bike or running five miles.

Run or sprint 15 to 25 yards, then walk three times that distance. Run again, walk again. You can do this over a 2 mile distance and get a pretty good work out.

I. There are undoubtedly a few more stretching exercises one could include, such as blatantly trying to put your nose between your kneecaps in a seated position, while keeping your legs straight. Place your hands under your kneecaps and squeeze down. The eventual goal is to put your nose between your knee caps. I doubt if many could do that the first time around. Don't bounce, That could injure your lower back, Squeeze gently and never try this, if you haven't done any other exercise before in that particular session.

It should be noted that I may have left out a detail or two, so don't hesitate to ask me, if you have a question or concern. Please note that the stretching and power building exercises described above can injure you, if you apply them too brutally. You want to build yourself up, not tear yourself down. You can gradually add on a few more reps, as your flexibility and strength improve, but safety first. You won't do anybody any good, if you are sitting on a bench, while the others skip around.

Yours in diving,

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